LOS ANGELES COUNTY
INTERNAL SERVICES

COUNTY OF LOS ANGELES
Internal Services Department
1100 North Eastern Avenue
Los Angeles, California 90063

Dave Lambertson
Director

To enrich lives through effective and caring service.

Telephone: (323) 267-2101
FAX: (323) 264-7135

May 25, 2006

Agenda Date: June 13, 2006

The Honorable Board of Supervisors
County of Los Angeles
500 West Temple Street
383 Kenneth Hahn Hall of Administration
Los Angeles, California 90012

Dear Supervisors:

RECOMMENDATION TO AUTHORIZE THE CHIEF INFORMATION OFFICER TO EXECUTE A WORK ORDER WITH COGNOS CORPORATION FOR BUSINESS INTELLIGENCE SOFTWARE DEVELOPMENT AND CONSULTING SERVICES (All Districts - 3 Votes)

CIO RECOMMENDATION: APPROVE [X] APPROVE WITH MODIFICATION [ ] DISAPPROVE [ ]

IT IS RECOMMENDED THAT YOUR BOARD:

Approve and direct the Chief Information Officer (CIO) at the request of the Director of the Internal Services Department to execute a Work Order for development and consulting services under the County's Business Intelligence Software Services Master Agreement (Master Agreement) with Cognos Corporation (Cognos) for the development of a Countywide Small Business Enterprise (SBE) Data Warehouse for a maximum amount not to exceed $270,000. This is in accordance with Board directive which requires that Work Orders that exceed $100,000 be approved by your Board.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

Background

In October 2002, your Board adopted the Local Small Businesses Enterprise (LSBE) Preference Program into ordinance as part of the County's ongoing "Bold Steps

Forward" efforts to ensure that a fair portion of County purchase orders and contracts are awarded to local Small Business Enterprises.
The Program's effectiveness has been measured through quarterly reports to the County's Small Business Commission and to your Board that measure facts related to the number of program registrations by businesses, and, solicitations and awards involving LSBE businesses. The primary focus has been on the total number and dollar value of purchase orders and contracts awarded to Small Business.

While this information is valuable, it does not provide insight into what the real opportunities for Small Business are, how awards to Small Business compare to total awards and if we are effectively identifying all Small Businesses in the area.

From a systems reporting standpoint, the ability to capture, analyze and report on Countywide LSBE information and transactions pertaining to LSBE activities has been fragmented because the information resides in disparate procurement and financial systems maintained by County departments. Meeting program reporting requirements is difficult and laborious as the data supporting the LSBE program resides in varied formats in both manual systems and computer systems.

To provide more complete program information, the Small Business Data Warehouse Project will contain detailed data (e.g., expenditure category, location of vendor, amount, etc.) on each payment made to Small Businesses. This data will reflect the total purchase order and contract payments made by the County for which Small Businesses should have been able to compete.

Concurrently, ISD is engaging a consultant to assist the department in developing demographic information on the number and types of Small Businesses within Los Angeles County and the goods and services they provide. The demographic information will enable us to compare what the County buys with what Small Businesses sell. This will allow us to better target our outreach efforts and, in working with the Small Business Commission, develop performance measures for the LSBE program, including ones related to the percentage of total orders that are awarded to Small Businesses.

By unanimous vote taken at a special meeting held on May 5, 2006, the County's Small Business Commission adopted and endorsed ISD's initiatives to enhance the data gathering and reporting initiatives described above.

Small Business Data Warehouse Project Description

The implementation of an LSBE reporting system will provide the opportunity to make the most of financial and procurement data related to LSBE activity. The project focus

will be to develop a data warehouse comprised of the multiple dimensions of related LSBE data to support the Program's reports requirements including:

- Local Small Business (LSBE) registrations.
- Departmental solicitations and awards where the LSBE preference was applied.
- Locations of LSBE businesses including zip code and supervisory district.
- Demographics for LSBE Businesses including number of employees, organization size and gross revenue.
- LSBE activity relating to commodities, services and the related dollar amounts dispersed to LSBE businesses.

Results and Benefits

Once implemented, the project results and benefits will include the following:

- Consolidates all LSBE data and activity into a single reporting system and structure.
- Provides a means for the Board Offices, the County's Small Business Commissioners, County Managers and Program Administrators to access and view all LSBE data and activities in an on-line web environment.
- Provides the ability to "slice and dice" views of LSBE program activity to determine:
    - The number and types of LSBE vendors are successful at obtaining County business.
    - The goods and services are being provided to County departments by LSBE vendors, and in what areas of the County.
    - The number and types of non-certified LSBE vendors who could compete for County business.

The information provided through this project will be extremely helpful in targeting specific future outreach efforts and establishing performance measurements for the LSBE Program.

Implementation of Strategic Plan Goals

The Chief Administrative Officer states that the Strategic Plan transforms the culture of the Los Angeles County organization. The LSBE reporting project constitutes a major step forward, changing the focus from simply reporting static data to efficiently to measuring and reporting on Program objectives and outcomes.

This initiative supports Goal 4, Strategy 2: to implement performance-based management decision-making processes based on Performance Counts. It also

supports the organizational effectiveness objective of establishing a centralized business intelligence reporting infrastructure based on the County standard software.

BACKGROUND

On May 10, 2005, your Board approved a Master Agreement with Cognos for BI Software Services that allows County departments to acquire consulting services for the development of reports, datamarts and dashboards that will provide the departmental staff and management with accurate information for effective decision-making.

The Master Agreement offers a structure for acquiring needed services through a streamlined acquisition process that is standard across the entire enterprise. Under the Work Order issuance process, individual department heads have the discretion and accountability for their respective projects. Work Orders established as part of the Master Agreement will be entered into the County's Information Technology Tracking System (ITTS), with defined deliverables delineated.

FISCAL IMPACT/FINANCING

The total amount for the Work Order will not exceed a maximum of $270,000. Sufficient funding is included in the Department's FY 2005-06 Adopted Budget.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The Master Agreement approved by your Board enables departments to utilize Work Orders for BI software installation, consulting services, employee training, design assistance and expertise in the use of Cognos Business Intelligence technology. As required in the CIO's letter to your Board, Work Orders over $100,000 shall be directed to your Board for authorization.

CONTRACTING PROCESS

In July 2003, the County released a Request for Proposals (RFP) for Business Intelligence Software, in response to which Cognos was selected as the winning bidder. As a result, on May 27, 2004, County and Cognos entered into a Purchase Order (PO) Software License Agreement and, consequently, on May 10, 2005, a Master Software Services Agreement. The Department has acquired BI Software licenses under the Software License Agreement and is seeking to procure professional services, consisting of BI Software installation, consulting services, employee training, design assistance and expertise in the use of Cognos BI technology in the development of reports, datamarts, dashboards and scorecards, under the Master Agreement.

IMPACT ON CURRENT SERVICES/PROJECTS

This project creates a Countywide framework to establish performance measurements critical to the success of the LSBE program, and provides the basis for Program Administrators, County Managers and Small Business Commissioners to monitor results throughout the County. Implementation of the Data Warehouse will enable data retrieval and review via self-serve access.

The end result of these endeavors will replace several ineffective data management and manual reporting systems with a viable automated solution that can be maintained and managed in the long term. Most importantly, it will provide more accessible, accurate and comprehensive data relating to LSBE programs and processes.

CONCLUSION

Upon approval, the Executive Officer, Board of Supervisors, is requested to return one (1) adopted stamped Board Letter and three (3) certified copies of the Board Order to the Director of the Internal Services Department.

Respectfully submitted,

INTERNAL SERVICES DEPARTMENT

Dave Lambertson
Director

Reviewed by:

CHIEF INFORMATION OFFICE

Jon W. Fullinwider
Chief Information Officer

DL:j

c: Chief Administration Officer
County Counsel
Executive Officer, Board of Supervisors
Auditor-Controller

CIO ANALYSIS

BUSINESS INTELLIGENCE WORK ORDER WITH COGNOS CORPORATION FOR THE DEVELOPMENT OF A COUNTYWIDE SMALL BUSINESS ENTERPRISE DATA WAREHOUSE

CIO RECOMMENDATION: ☒ APPROVE ☐ APPROVE WITH MODIFICATION ☐ DISAPPROVE

Contract Type:

☐ New Contract ☐ Contract Amendment ☐ Contract Extension
☐ Sole Source Contract ☐ Hardware Acquisition ☒ Other

New/Revised Contract Term: Base Term: 6 Months # of Option Yrs 0

Contract Components:

☐ Software ☐ Hardware ☐ Telecommunications
☒ Professional Services

Project Executive Sponsor: David Lambertson, Director, Internal Services Department

Budget Information :

Y-T-D Project Expenditures	$0
Requested Project Amount	$270,000
Aggregate Project Amount	$270,000

Project Background:

Yes	No	Question
☐	☒	Is this project legislatively mandated?
☐	☒	Is this project subvented? If yes, what percentage is offset?
☐	☒	Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved?

Strategic Alignment:

Yes	No	Question
☒	☐	Is this project in alignment with the County of Los Angeles Strategic Plan? Yes. The Countywide Small Business Enterprise Data Warehouse supports the County's Strategic Plan Goal No. 4: to implement performance-based management decision-making processes based on Performance Counts! and the organizational effectiveness objective of establishing a centralized business intelligence reporting infrastructure based on the County standard software: Cognos.
☐	☒	Is this project consistent with the currently approved Department Business Automation Plan? The Small Business Enterprise Data Warehouse project is an unanticipated new project and is not identified in the Department's FY 2006-2007 Business Automation Plan.

Strategic Alignment, Continued

Yes	No	Question
☒	☐	Does the project's technology solution comply with County of Los Angeles I/T Directions Document? The Department's data warehouse project complies with I/T Directions document by conducting government electronically to improve the delivery of services.
☒	☐	Does the project technology solution comply with preferred County of Los Angeles I/T Standards? The Department's data warehouse project utilizes Cognos software, the County's business intelligence software standard as set by your Board.
☒	☐	This contract and/or project and its milestone deliverables must be entered into the Information Technology Tracking System (ITTS).

Project/Contract Description:

The Director of the Internal Services Department (ISD) is seeking your Board's approval for the Chief Information Officer (CIO) to execute a Business Intelligence (BI) Work Order (WO) with Cognos Corporation (Cognos) for a total maximum cost of $270,000 as provided for in the CIO's Business Intelligence Software Services Master Agreement (Master Agreement) with Cognos executed May 10, 2005. The WO will assist ISD in the development of a data warehouse that is needed for the full implementation of performance-based decision-making for the Local Small Businesses Enterprise Preference Program (LSBE) utilizing Performance Counts! data.

Background:

In October 2002, your Board adopted the LSBE into ordinance as part of the County's ongoing "Bold Steps Forward" efforts to ensure that a fair portion of County purchase orders and contracts are awarded to local small business enterprises. The program's effectiveness has been measured through quarterly reports to the County's Small Business Commission (Commission) and to your Board. The quarterly reports measure supporting data related to the number of program registrations by businesses and the number of solicitations and awards involving LSBE businesses. The primary focus has been on the total number and dollar value of purchase orders and contracts awarded to small businesses.

The LSBE data warehouse project, endorsed by the Commission, will allow the Department to aggregate a larger set of Performance Counts! data to augment the dollar value of purchase orders and contracts data identified above and to consolidate all LSBE data and activity into a single reporting system and structure. It will provide the Board Offices, the Small Business Commissioners, County Managers and Program Administrators with the ability to view and analyze all LSBE data and activities in an on-line Web environment.

Project Justification/Benefits:

The LSBE data warehouse will contain information regarding the expenditure category, location of vendor and dollar amount for each payment made to small businesses. The information collected will allow the Board Offices, County's Small Business Commissioners, County Managers and Program Administrators to:

- Compare what the County buys with what small businesses within the County sell;
- Monitor the total purchase order and contract payments made by the County; and
- Monitor the purchase order and contract payments made to small businesses.

Analysis of this data will allow the County to better target outreach efforts and, in working with the Commission, develop performance measures for the LSBE Program, including ones related to the percentage of total orders that are awarded to small businesses.

Project Metrics:

The implementation plan for the LSBE data warehouse project is subdivided into tasks with defined acceptance criteria for each task. The project's timeline is of short time duration and will require consistent monitoring to ensure its success. A synopsis of the tasks required for the data warehouse includes:

- Developing requirements for the reporting that is desired from the data warehouse;
- Designing, building and loading the data warehouse;
- Designing the data models to support the reporting requirements;
- Designing the conversion and testing processes for data that will be loaded into the data warehouse; and
- Performing data quality, data validation, and report performance prior to acceptance testing.

Impact On Service Delivery Or Department Operations, If Proposal Is Not Approved:

The impact on the LSBE Program if this WO is not approved will be continued reliance on inadequate sets of data that are used to monitor the program's success and located in various disparate systems. While a limited set of data is valuable, it does not provide insight into what the real opportunities for small businesses are, how awards to small businesses compare to total awards and if we are effectively identifying all small businesses in the area.

Alternatives Considered:

The alternatives are to keep the current methodology for reporting on the LSBE Program or to upgrade the disparate systems capturing the current set of data. Neither alternative provides for the development, aggregation and reporting on the performance measures needed to assess the success of the County's outreach efforts to small businesses.

Project Risks:

The LSBE data warehouse project has the normal risks for project implementation. The Department has mitigated these risks by providing executive sponsorship, stable project staffing, clear project roles and responsibilities and a project plan with defined deliverables and acceptance criteria. The project has a defined issue management process for resolving risk as they appear. The current risks to be monitored are:

- Unavailability of LSBE end user and subject matter experts for developing the requirements processes;
- Lack of access to the data sources required for the LSBE data warehouse project;
- Untimely set up of development, test and production computing environments for building the data warehouse and the reports; and
- Unavailability of training for LSBE users and subject matter experts.

Risk Mitigation Measures:

The project team will monitor these risks as well as other risks as they appear, and will act quickly to reduce or eliminate any potential risks. As indicated on the Strategic Alignment section of this analysis, project deliverables and milestones will be tracked on the Information Technology Tracking System (ITTS).

Financial Analysis:

The Work Order will provide for development of the LSBE data warehouse at a total maximum cost of $270,000. ISD participants will receive mentoring and training as the WO is developed.

CIO Concerns:

None.

CIO Recommendations:

The Department's LSBE data warehouse project is aligned with the County's Strategic Plan and I/T Strategic Directions. Data warehouse initiatives such as this add value to the County as a whole and improve the organization's ability to monitor the County's program results for increased effectiveness. My office supports this action and recommends approval by the Board.

CIO APPROVAL

Date Received: May 30, 2006

Prepared by:

Date: May 30, 2006

Approved:

Date: May 30, 2006

P:\Drafts\CIO Analysis LSBE Data Warehouse.doc

Los Angeles County Master Services Agreement 75270
Cognos /ISD Purchasing and Contracts Work Order
Local Small Business Enterprise BI Project

Department	ISD – Purchasing and Contracts Division
Department Project Manager	Mark Martinez
Date	May 2, 2006

☐	Installation Services	☐	Training Services	☐	BI QuickStart Services
☐	Professional Services	☒	Consulting Services	☐	BI Service Package

INTRODUCTION

This Work Order effective upon execution, is between Cognos Corporation, a Delaware corporation located at 15 Wayside Road, Burlington, Massachusetts 01803 ("Cognos") and LA County – ISD – Purchasing and Contracts Division ("LAC-ISD") and shall be governed pursuant to the Software Services Agreement ("Terms") between Cognos and The County of Los Angeles dated as of May 10, 2005. Capitalized terms in this Work Order not otherwise defined shall have the same meanings as set forth in the Terms.

WORK ORDER MANAGEMENT SUMMARY AND BUSINESS OBJECTIVE

LA County ISD – Purchasing and Contracts Division will be upgrading their LSBE reporting systems to a single reporting Data Mart and related BI Reports. ISD will be building the reporting and analysis application to provide the level of information needed by county executives to analyze the effectiveness of the LSBE program. Cognos will lead this effort with the support and participation of ISD. This Work Order describes the effort required to create the LSBE BI Reporting Application.

The following is a list of key business objectives

- Assess and Define Business Requirements for BI Reporting from the LSBE Systems.
- Create a Data Mart to provide a robust reporting platform for LSBE data.
- Support robust data analysis and reporting through the use all relevant components of the Cognos BI toolset.
- Provide a base level understanding of the Cognos toolset to the ISD team members.

WORK ORDER PROJECT DEFINITION

This is a firm fixed fee work order.

The outcome of this Work Order will be delivery of an LBSE Data Mart and initial BI Reporting application.

.

WORK ORDER STATEMENT OF SERVICES

1. Application systems design documentation:
   LAC-ISD has provided the LSBE Charter Document.

2. Detailed description of tasks subtasks, milestones and deliverables:
   The LSBE Project does not need to be executed in conjunction with nor is it contingent on the schedule for eCAPS Procurement reports design and development..

   Please see the attached document titled ***Local Small Business Enterprise BI Reporting - Project Scope.***

3. Identification of all required County and Contractor resources and staff:
   County staff –
   - County Project Sponsor – Joe Sandoval – Project Director
   - County Project Manager – Mark Martinez
   - Subject Matter Experts (SME) from LAC-ISD
   - Database, Infrastructure, eCAPS technical personnel as required from LAC-ISD other appropriate departments.

   County resources –
   - Server, network, database access, user list as required
   - PC workstation connected to network for data extract design (as described below in Obligations of LA County) for each consultant
   - Additional resources

   Cognos staff –
   - Project Manager: Lindsay Korstange
   - Business Intelligence Consultant (for BI reporting tasks)
   - Data Modeling Consultant (for Decision Stream and Framework tasks)

4. Detailed project plan:
   Please see the attached document titled, ***Local Small Business Enterprise BI Reporting – Gantt Chart.***

5. Cost documentation:
   This Work Order is a firm fixed price bid. The total cost, including travel and living expenses for the completed work order is $243,198.00. Payment for services rendered is described below in the Work Order Payment Schedule section.

6. Work Order technical development process:
   As described in the attached ***Local Small Business Enterprise BI Reporting - Project***

Scope and represented in the attached ***Local Small Business Enterprise BI Reporting – Gantt Chart***, work order tasks are:

1. Data Mart Creation
2. Create Scoping and Business Requirements Documentation
3. Create Framework Manager Model
4. Create PowerPlay Cube
5. Create Initial BI Reports

7. Acceptance Criteria:
All deliverables shall be transferred to LAC-ISD by Cognos, and reviewed and tested by LAC-ISD, using the approval process set forth below where each party shall adhere to this process with regard to all performance and all deliverables provided, or that are to be provided, by Cognos under this Work Order.

Once the deliverable has been developed and successfully tested by Cognos per applicable specifications and test criteria, Cognos shall sign off on the deliverable as complete, provide the deliverable to LAC-ISD, and notify LAC-ISD in writing that it is ready for testing through the Work Order Acceptance form. Promptly after receipt of such a notification, LAC-ISD shall commence quality assurance ("Q&A") testing to verify whether such deliverable meets the applicable specifications and test criteria. Additional user testing may be performed by LAC-ISD following the Q&A testing, but is not included in the official sign-off process required by this Work Order and described herein.

8. Initial Acceptance:
Initial acceptance shall be achieved upon delivery of each document, file and/or code (as described in ***Local Small Business Enterprise BI Reporting - Project Scope)*** as set forth in the Work Order Payment Schedule below.

9. Data Refresh Period (Consulting Services):
1 month

10. Final Acceptance:
Final acceptance shall be achieved upon successful completion of one data refresh period after all tasks are completed and acceptance of all deliverables as described below.

11. Work Order Warranties:
Warranty is 30 days after Final Acceptance.

12. Work Order Approval:
Not withstanding anything to the contrary in the Agreement, LAC-ISD shall approve or disapprove the Deliverable(s) under this Work Order within five (5) business days ("Notification Period"). Failure by LAC-ISD to notify Cognos whether a Deliverable is approved or disapproved or failure between LAC-ISD and Cognos to agree on whether a Deliverable meets the defined acceptance criteria will immediately invoke the Dispute

Resolution Procedure set forth in Paragraph 70.4 of the body of the Agreement.

If LAC-ISD determines within such Notification Period that such Deliverable fails to meet the applicable requirements or to satisfy the applicable Acceptance Criteria, LAC-ISD shall notify Cognos in writing thereof within the Notification Period, setting forth in reasonable detail the defects or Deficiencies of such Deliverable. Upon receipt of such a written notice, Cognos shall promptly correct such defects or Deficiencies. Cognos shall notify LAC-ISD when such corrections have been completed and the Deliverable is ready for retesting and a new Notification Period.

A Deliverable shall be deemed complete, approved and accepted by LAC-ISD when LAC-ISD provides Cognos with written notice that it has determined that such Deliverable meets all material requirements and specifications applicable thereto, as described in the Statement Of Services for this Work Order.

Defects or Deficiencies noted outside of the Notification Period or the Warranty Period shall be handled through the change order process.

WORK ORDER PAYMENT SCHEDULE

Payment for Work Orders for Consulting Services shall be due and payable following Acceptance for such Services as set forth in Section 7.

The table below breaks down the major deliverables for each Task, that are to be delivered or achieved by Cognos in its performance under this Work Order, and LAC-ISD's acceptance in accordance with Work Order Statement of Services - Section 7 of each such deliverable and the applicable percentages of the fees set forth in Work Order Statement of Services - Section 5 that are associated with Cognos' completion.

Deliverable Delivery and Payment Percentage

1. LSBE Data Mart	25%
2. Scoping and Business Requirements Document	20%
3. Framework Manager Model	20%
4. PowerPlay Cube	10%
5. Initial Reports	15%
6. Final Project Acceptance	10%

Work Order Total (from Section 5): $218,918.00

WORK ORDER ACCEPTANCE DEFINITION

1. **LSBE Data Mart:** The intent of the LSBE Data Mart is to provide a single source of data for LSBE reporting and analysis. Acceptance should be based on:
   - Correctness – Has the data contained in the data mart been validated?
   - Completeness – Are all data sources represented?
   - Inclusion – Have identified business rules and aggregations been applied to the data during the ETL process?
2. **Scoping and Business Requirements Document:** The intent of the Scoping and Business Requirements Document is to accurately define the reporting and analysis needs for the LSBE project through the use of Cognos PowerPlay or ReportNet; Describe the Application layer of Framework Manager (the meta data layer). Acceptance should be based on:
   - Correctness – Are the requirements accurately defined?
   - Completeness – Are all requirements addressed with a solution or reasons for exclusion provided?
3. **Framework Manager Model:** The intent of the Framework Manager Model is to provide the metadata layer for all ReportNet reports. Acceptance should be based on:
   - Correctness – Does the Data layer properly define the Data Mart tables, columns and joining strategy?
   - Completeness – Will the Application Layer support Ad-Hoc reporting for the business users?
   - Inclusion – Have all tables and columns from the Data Mart been included?
4. **PowerPlay Cube:** The intent of the PowerPlay Cube is to provide an OLAP (On-Line Analytical Processing) platform for LSBE reporting and analysis. Acceptance should be

based on:

- Correctness – Has the data contained in the cube been validated?
- Completeness – Are all dimensions and measures defined represented?
- Inclusion – Have identified business rules been properly represented?

5. **Initial Reports:** The intent of the Initial Reports is to provide a maximum of one (1) Visualizer dashboard, five (5) ReportNet and five (5) PowerPlay reports for LSBE reporting and analysis. Acceptance should be based on:
   - Correctness – Has the data represented in the reports been validated?
   - Completeness – Have all agreed upon reports been delivered?
   - Inclusion – Are the report designs properly implemented including all columns, aggregations, etc.?

Work Order Approval	Signature	Date
Work Order Number Assigned	75270-	
County's Project Manager		
Department Project Manager		
Cognos Project Manager		

ATTACHMENTS: ***Local Small Business Enterprise BI Reporting - Project Scope***
Local Small Business Enterprise BI Reporting - Gantt Chart

COGNOS®

Local Small Business Enterprise – BI Reporting

PROJECT SCOPE

for

LA County - ISD – Purchasing and Contract Services

1100 N. Eastern Avenue, Los Angeles, CA 90063

Change Control

Date	Version	Author	Change Description
5/2/2006	1.0	Jim Davis	Initial Draft
5/10/2006	1.1	Jim Davis	Insert clarifications requested

Table of Contents

1. Management Summary 4
1.1 Original Scope 4
2. Business Objectives 5
3. Target Audience 6
4. Current State/Future State 7
5. Source Data Requirements 8
6. Solution Scope Assumptions and Project Parameters 9
6.1 Assumptions 9
6.2 Project Scope 9
6.3 Proposed Development Effort 9
7. Deliverables List 12

1. Management Summary

The purpose of this document is to describe the LA County ISD Purchasing and Contract Services (ISD) – Local Small Business Enterprise (LSBE) Business Intelligence (BI) Reporting Project, a fixed price bid. It describes the solution –what is in scope for the project and what is excluded. This document also outlines high level requirements for infrastructure and architecture to support the development and implementation.

1.1 Original Scope

This is an estimate of the scoping activities and design strategy effort for the development of Business Intelligence reports using Cognos ReportNet and PowerPlay cubes. The strategy and scoping activities were based on requirements gathered from discussions with management. The strategy will encompass both the need for Standard Reports, On-Demand reports and Ad-hoc data querying using the LSBE Project information.

The LSBE BI Reporting Project has the following main objectives:

1. Interview and gather business requirements from the business users that will be using the system, as well as those that are currently creating the reporting for the LSBE Project.
2. Build a data mart that encompasses all data sources that will fill all business requirements for the LSBE Project.
3. Prototype a PowerPlay cube and reporting environment for demonstration and user test with real time data that meets specific business needs. This will further define the business requirements and can be used as a template for additional PowerPlay cubes and reports.
4. Create Framework Model to support the ReportNet reports and Ad-Hoc querying capability.
5. Create a set of detailed report design documents for the development of Static, On-Demand and Ad-Hoc functionality that will further define the mix of OLAP (PowerPlay) and Column (ReportNet) reports.

2. Business Objectives

- Assess and Define Business Requirements for BI Reporting from the LSBE Systems.
- Create a Data Mart to provide a robust reporting platform for LSBE data.
- Support robust data analysis and reporting through the use all relevant components of the Cognos BI toolset.
- Provide a base level understanding of the Cognos toolset to the ISD team members.

3. Target Audience

The Target Audience for the LSBE BI Reporting application is ISD Purchasing and Contracts Services management team as well as executive level consumers through out the county.

4. Current State/Future State

The current LSBE reporting is collected from a number of disparate systems, including excel spreadsheets as well as several applications from county departments. The information is compiled manually for reporting purposes.

The future direction for this project is planned to be –

a) Reporting for county wide LSBE analysis will be consolidated into a single reporting source.
b) A reporting database, created to encompass departmental system date as well as eCAPS financial data that will be used for all BI reporting.
c) The Cognos toolset will be used to report from infoAdvantage.

5. Source Data Requirements

ISD has identified all source data and will provide it in staged flat files for the Cognos team to access for ETL processing. The eCAPS Period Extract flat files and up to two additional flat files with LSBE data will be used.

If required due to performance or other requirements, ISD will develop a process external to the Cognos toolset to transform source data into the appropriate structure for load into the data mart. Definition of business rules, data cleansing, etc. will be the sole responsibility of ISD.

6. Solution Scope Assumptions and Project Parameters

6.1 Assumptions

- Access to the key business users and subject matter experts (SME) is key to the success of this project. Key business users and SMEs will be readily available throughout the time period defined in the Gantt Chart via email, phone or in-person for project phases not limited to and including requirements definition, reports design development and testing.
- The BI reporting toolset has been defined using PowerPlay, Cognos ReportNet and Visualizer.
- Access to all data sources that are required to make up the universe for the LSBE Project. This will include a feed or access from the eCAPS source system.
- Appropriate steps will be facilitated with ISD to create a development and test environment for applications and have consultant's laptop scanned under LA County Security

6.2 Project Scope

- Interview and gather business requirements from the LSBE business users.
- Prototype a PowerPlay cube and reporting environment for demonstration and user test with existing LSBE and eCAPS Financial data. This will further define the business requirements.
- Create a Data Mart to provide a single source for all LBSE reporting and analysis.
- Create a report design document for the development of Static, On-Demand, and Ad-Hoc functionality that will further define the mix of OLAP, On-Line Analytical Processing (PowerPlay) and Column (ReportNet) reports.
- Create a Framework Manager Model to support the reporting defined in the design document.
- Create the static and On-Demand reports as defined in the design document.
- Set the stage for migration to Cognos 8 technology when licensing issues are resolved at the county.
- At a predefined stage in project, provide a demo of the prototype to the project sponsors i.e... ISD Executive and Office of Small Business management.

6.3 Proposed Development Effort

Design and Build Reporting Data Mart

- Build Data Mart that will encompass all data for the LBSE Project.
  - Identify all data sources that will be used for the LBSE single source.
  - Decision Stream – Once all the source files have been identified, tasks will include:
    - Creating links to the source files to bring data into the environment.
    - Transformation processes will be developed to create a single source of data for the reports.
    - Business Rules supplied by ISD will be applied.
    - Loading tables into Oracle Data Mart.
  - Applying proper indexing and other performance best practices.
- **Data Mart Considerations:**
  - Performing data validation will be the responsibility of ISD.
  - Data Mart will encompass data from the eCAPS Period Extract file as well as up to two additional sources.
  - ISD will provide all business rules for data transformation or cleansing.
  - Access to an ISD DBA will be essential to the success of this phase.

Interviews and Business Requirements Gathering

- Identify key players and SMEs with business needs and requirements.
- Interview each key player for functional requirements
  - Classify current reports that need to be replicated and enhanced using new reporting platforms.
  - Review data needs and assessment of future reporting plans.
  - Appraise data for availability and degree of compliance with standards defined to support LSBE reports.
  - Discover key measures needed for performance measuring of the Procurement activities.
  - Categorize common reporting metrics to be used within Ad-Hoc and Standard Reporting.
- **Interviews and Business Requirements Gathering Considerations:**
  - Key Business Users and SMEs must be readily available via email, telephone or in person.

Scope and Business Requirements Documentation

- Document report and structure requirements, including report allocation to specific tools sets.
- Create Design documentation for new PowerPlay cube and reporting needs off of the PowerPlay development.
- Create ReportNet report specifications for Static and On-Demand reports.
- Create Framework Manager Model specifications for the Presentation layer.
- Create Dashboard specifications.
- **Business Requirements Documentation Considerations:**
  - Key Business Users and SMEs must be readily available to review the documents.

Create PowerPlay Cube

- Resource gains understanding to of the business processes of the LSBE project, how business users handle a full cycle of data and the specific data requirements needed to report on all identified business needs through reporting activities.
- Identify sourcing of cube from LSBE data – data needs to be identified that has a full month/quarter of vendor and purchase order data and encompasses benchmarking measures and dimensions.
- Create source file(s)/table(s) and import data into Transformer to start build.
- Identify and create Dimensions outlined through requirements.
- Identify key measures that can be derived from the existing data and provide value within dataset available.
- Build up to two (2) designated reports to show PowerPlay functionality, reports will encompass dimensional hierarchies and measures.
- This activity will provide an initial PowerPlay cube that can be used as a template for full development of the PowerPlay strategy.
- **PowerPlay Cube Considerations:**
  - One PowerPlay cube will be created for this project.
  - PowerPlay functionality will be directly related to data available in the Data Mart.
  - Data outside of the LSBE Data Mart will not be used in the creation of the PowerPlay cube.

Create Framework Manager Model

- Develop Physical Layer encompassing single data mart (using Decision Stream option from above) or joining all data sources (using Framework as your data model solution)
- Build Presentation Layer to incorporate business rules for all report requirements.
- Testing and data validation performed on all layers that are involved in development of the LSBE model. This would include having a review of the model by the Cognos Best Practices team in Ottawa.
- Publish Package on Presentation Layer for ReportNet development.

- **Framework Manager Model Considerations:**
  - ISD will supply all business rules to be applied through the model.
  - Data validation will be the responsibility of ISD.

Initial Report Development

- Identify a set of 4-5 reports that will be developed within ReportNet that will meet the identified business needs. These reports will be both Standard and Stand-Alone reports available through the web server.
- Identify a set of 4-5 reports that will be developed upon the PowerPlay cube data that has been created specifically for LBSE initiative.
- Identify one dashboard to be created in Visualizer.
- Design and develop the 4-5 ReportNet reports. This will include any additional updates that may be needed to the Framework Model.
- Design and develop the 4-5 PowerPlay reports.
- Design and develop one Visualizer dashboard.
- Perform system test and data validation for all reports. This will involve following a check list of business user defined validation rules and a Cognos Best Practices.
- **Report Development Considerations:**
  - ISD will provide Key Business Users and SMEs for report UAT.

7. Deliverables List

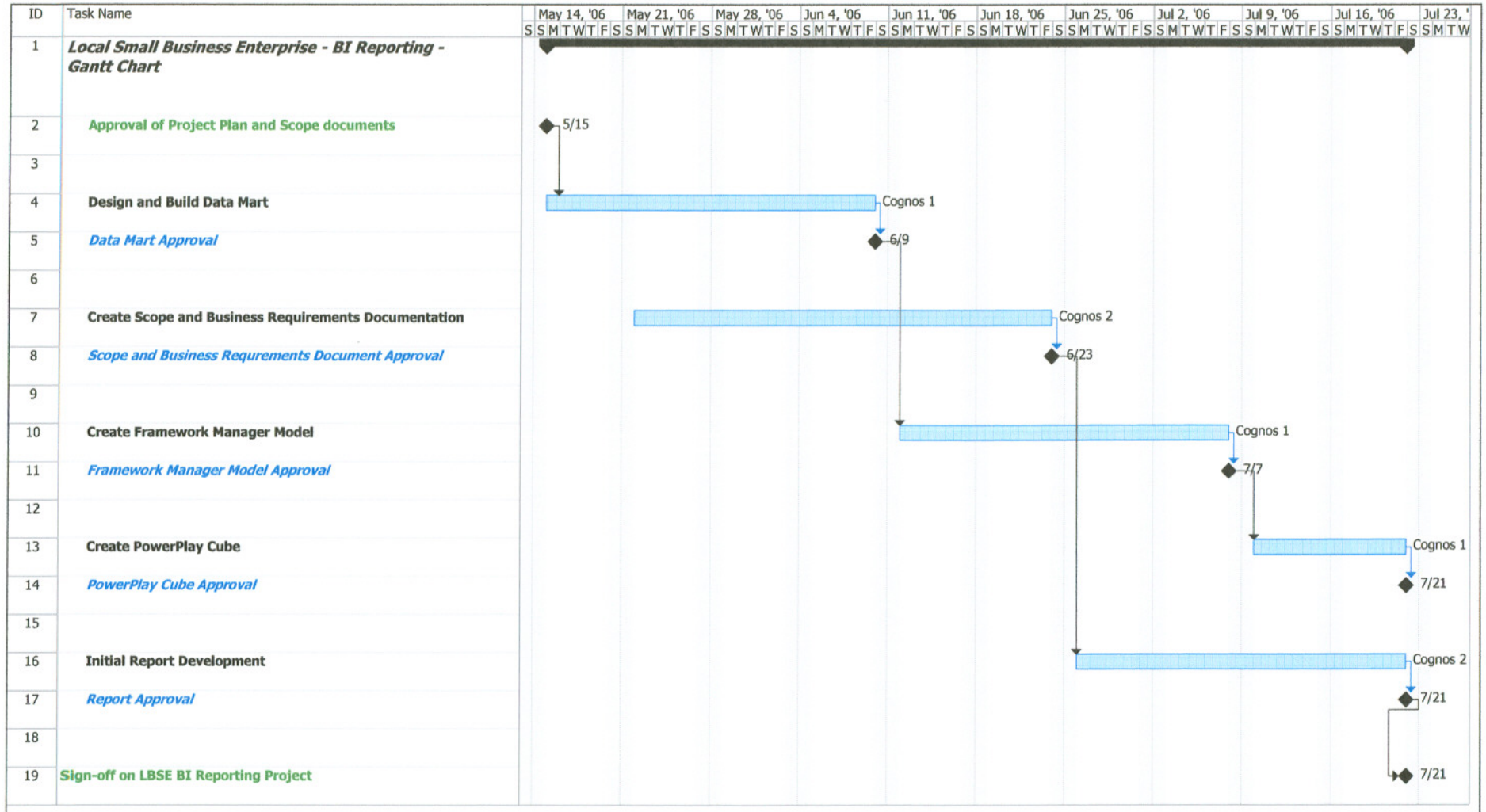
Refer to the Gantt Chart project plan for details on deliverables and different project sub-tasks.

Documentation Deliverables

1. Project Scope	Before project begins
2. Project Plan	Before project begins
3. BI Business Requirements Definition	Fifth week

Technical Object Deliverables

1. PowerPlay Cube	Fifth week of Project
2. PowerPlay Guided Discovery	Beginning of sixth week
3. SBE Data Mart	Fourth week
4. Framework Manager Model	Eighth week
5. Reports	Tenth week



Project: Project Plan DHS HMMS 2005
Date: May 3

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline